SYSTRON DONNER

A THORN EMI company

S5711/S5710

SYSTRON DONNER
Member THORN EMI Group

S5711/S5710

INSTRUMENT DIVISION

POWER
SUPPLIES

OPERATING AND SERVICE MANUAL

2727 Systron Drive • Concord, California 94518 • U.S.A.
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FSCM No. 52542

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SYSTRON DONNER
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TEST & MEASUREMENT GROUP OF SYSTRON DONNER WARRANTY POLICY

I Warranty

The Test & Measurement Group of Systron Donner warrants that at the time of shipment the products manufactured by Systron Donner's T & M Group and sold hereunder will be free from defects in material and workmanship and will conform to the specifications furnished by or approved in writing by Systron Donner's T & M Group.

II Warranty

A The warranty period for products published in our latest product catalog will be one year from the date of shipment. This warranty is extended only to the original buyer.

B The warranty period for products published in prior catalog, will be 90 days from the date of shipment.

C The warranty period for modified standard products, custom products, or new spare part assemblies will be 90 days from the date of shipment.

D The warranty period for systems or assemblies of miscellaneous components and products will be limited to the warranty for the stand alone component or instrument. The system itself is not guaranteed unless a specific installation and service agreement has been negotiated between Systron Donner and the customer. In this latter case, the warranty period will be 30 days after the installation of the system while the various portions of the system will be limited to the normal component or instrument stand alone warranty, and for non Systron Donner material within the system that is furnished by Systron Donner the warranty will be limited to the supplier's normal warranty.

III Warranty Adjustments

A If any defect within this warranty appears, Purchaser shall notify Seller immediately.

B Systron Donner's T & M Group agrees to repair or furnish a replacement for, but not install, any product which, within the standard warranty shall, upon test and examination by Systron Donner's T & M Group, prove defective within the above warranty period.

C No product will be accepted for return or replacement without the written authorization of Systron Donner's T & M Group. Upon such authorization and in accordance with instructions by Systron Donner's T & M Group, the product will be returned to the original manufacturing location, shipping charges prepaid by Purchaser.

IV Exclusions from Warranty

A The foregoing warranty is in lieu of and excludes all other expressed or implied warranties of merchantability or fitness or otherwise.

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C The warranty does not extend to any product manufactured by Systron Donner's T & M Group which has been subjected to misuse, neglect, accident, improper installation or to use in violation of instructions furnished by Systron Donner's T & M Group.

D The warranty does not extend to or apply to any unit which has been repaired or altered at any place other than at a Systron Donner T & M Group factory, by persons not expressly approved by Systron Donner's T & M Group, not to any unit, the serial number of which has been removed or defaced or changed.

E This warranty applies to new equipment only and will cover repaired or replacement items only to the extent of the balance remaining of the items original warranty period noted above in Paragraph II.

F All freight charges will be paid for by the Purchaser.

Divisions in the Test & Measurement Group include:
Instrument Division — Concord, CA
ACD Division — Sunnyvale, CA
SD GmbH — Munich, West Germany

January 1982

SYSTRON DONNER
Member THORN EMI Group

INSTRUMENT
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CHAPTER 1
GENERAL INFORMATION

1.1 INTRODUCTION

This instruction manual contains the operation and maintenance instructions for the Systron-Donner Trygon Models 23-12-S5711 and 125-3-S5710 Power Supplies, which are highly reliable power supplies developed for the General Electric Company under specifications U6028AB PW-23V and U6028AA PW-125V. The contents of this manual is divided into six chapters. Chapter 1 provides the general description and specifications for the power supplies. Chapter 2 includes the receiving inspection, unpacking and preparation for use instructions. Chapter 3 describes the operation of the Power Supply as to the use of the controls, connectors and test points located on the rear panel. Chapter 4 provides the principles of operation and a description of the electronic circuits. Chapter 5 contains the replaceable parts lists and the electrical and mechanical assembly diagrams are contained in Chapter 6.

1.2 GENERAL DESCRIPTION

The Model 23-12-S5711 Power Supply provides 23 Vdc (adjustable from 21 Vdc to 24 Vdc) at 12 amperes and the Model 125-3-S5710 Power Supply provides 125 Vdc (adjustable from 105 Vdc to 132 Vdc) at 3 amperes, to components used in the Electro-Hydraulic Control (EHC) Console of the General Electric Steam Turbine generator systems. All the connectors, adjustment access ports, controls and meter test jacks are located on the Rear Panel. The Front Panel of the Power Supply mounts the two blower assemblies and provides for the exhaust of the air flow. The high heat dissipating components are mounted on heat sinks that are placed in the air flow venturi or mounted on the venturi baffel walls. A printed circuit board provides the regulator and protector circuits which is mounted to the interior of the Rear Panel, two access ports are provided for the adjustment of the output voltage level and over voltage potentiometers which are PCB mounted.

1.3 SPECIFICATIONS

Table 1-1 lists the specifications and leading particulars of the Power Supplies.

TABLE 1-1 SPECIFICATIONS

SPECIFICATION	MODEL 23-12-S5711	MODEL 125-3-S5710
Output		
Voltage:	21 to 25 Vdc adjustable.	105 to 132 Vdc adjustable.
Maximum Current:	12 amperes.	3 amperes.
Load Effect, V out change for any load change:	≤0.2% +2 mV.	≤0.5% +100 mV.
Source Effect, V out change for line change of 105 Vac to 132 Vac and 46.5 to 67 Hz.	≤.01% +1 mV.	≤0.5% +50 mV.

TABLE 1-1 SPECIFICATIONS (Cont'd)

SPECIFICATION	MODEL 23-12-S5711	MODEL 125-3-S5710
Ripple and Noise @60 Hz input:	≤0.5 mV rms. ≤3 mV peak-to-peak.	≤25 mV rms. ≤75 mV peak-to-peak.
Temperature Coefficient change in V out per °C change in ambient temperature:	.01%/°C.	.01%/°C.
Power Turn on/turn off Voltage Overshoot:	≤5% of output rated voltage.	≤5% of output rated voltage.
Regulation Recovery Time:	≤100 µs to within 500 mV of set voltage for a load change of 25% to 75% maximum load.	≤100 µs to within 500 mV of set voltage for a load change of 25% to 75% maximum load.
Over Voltage Protection:	Adjustable from 22 Vdc to 26 Vdc ≤1 mS reaction time to "crow bar" output after a 20 µs overvoltage sense period.	Adjustable from 125 Vdc to 130 Vdc ≤1 ms reaction time to "crow bar" output after a 20 µs overvoltage sense period.
Current Limitig:	Will limit the current at 110% 5% of maximum rated output. Foldback ≥50% of maximum rated output with a short circuit.	Will limit the current at 110% 5% of maximem rated output. Foldgack ≥50% of maximum rated output with a short circuit.
Input Power Requirement:	105 Vac to 132 Vac 46.5 Hz to 67 Hz 1 kW maximum power.	105 vAc to 132 Vac 46.5 Hz to 67 Hz 1 kW maximum power.
Physical Characteristics		
Height: Width: Depth: Weight:	8 inches (20.32 cm). 23 inches (58.42 cm). 14 inches (35.56 cm). 55 pounds (24.8 kg).	8 inches (20.32 cm). 23 inches (58.42 cm). 14 inches (35.56 cm). 55 pounds (24.8 kg).
Operating Temperature with no derating of specifications:	-20°C to +70°C.	-20°C to +70°C.

Other than the above specifications the Model 23-12-S5711 and 125-3-S5710 Power Supplies meet all specifications requirements of the General Electric Specification U6028AB REV 9 and U6028AA REV 6.

CHAPTER 2
INSTALLATION

2.1 INTRODUCTION

The Models 23-12-S5711 and 125-3-S5710 Power Supplies are shipped in an operational condition and are essentially ready for use as received. This chapter outlines the procedures for initial inspection and installation of the Power Supplies. Instructions for reshipment are also included should the unit be returned to Systron-Donner Corporation for service or repair.

2.2 RECEIVING INSPECTION

Prior to accepting a Power Supply from the shipper, inspect the condition of the shipping container for any indication of freight damage. Any sign of such damage must be noted by both the shipper and receiver and should be reported to the carrier.

Immediately following removal of the instrument from the shipping carton, inspect for possible physical damage incurred during shipment. Check surfaces for scratches or dents and note condition of knobs and connectors. Should any damage be noted, notify your nearest Systron-Donner representative--DO NOT USE THE POWER SUPPLY UNTIL INSTRUCTED TO DO SO BY THE REPRESENTATIVE.

2.3 RESHIPMENT

When a Power Supply is to be repackaged for shipment use the original packing materials. Your Systron-Donner field office can provide materials similar to those used for the original factory packaging, or repackage the instrument following these general instructions.

1. Attach a tag to the Power Supply indicating the model number, serial number, name and address of the owner, and a summary of the service or repairs required.

2. Wrap the Power Supply in heavy paper or plastic prior to placing it into the shipping container.

3. Use an adequate layer of shock-absorbing material on all sides of the unit, and protect the Rear Panel with additional layers of cardboard. Be certain that there is no movement of the unit within the container.

4. Select a strong carton or wooden box to house the instrument.

5. Seal the package with strong tape or metal bands.

6. Mark the shipping container "FRAGILE-DELICATE INSTRUMENT" to ensure careful handling.

7. Be certain that all correspondence refers to full Power Supply nomenclature (model and serial number).

2.4 INSTALLATION AND INITIAL OPERATION

The Power Supply is designed to be installed in a system to provide power to components used in the General Electric Electro-Hydraulic Control (EHC) Console, so installation is set by the system and power supply design contraints.

A 100 hour "burn-in" test has been conducted on the Power Supply, followed by a complete electrical retest. A test data sheet is supplied providing the test results for both the initial and final test values. This test data sheet is packed in the respective Power Supply shipping carton and is identified by Model and serial number.

CHAPTER 3
OPERATION

3.1 INTRODUCTION

This chapter describes the operation of the Model 23-12-S5711 and the 125-3-S5710 Power Supplies as to their Rear Panel connectors, controls and measurement features.

3.2 REAR PANEL CONTROLS, CONNECTORS AND TEST POINTS

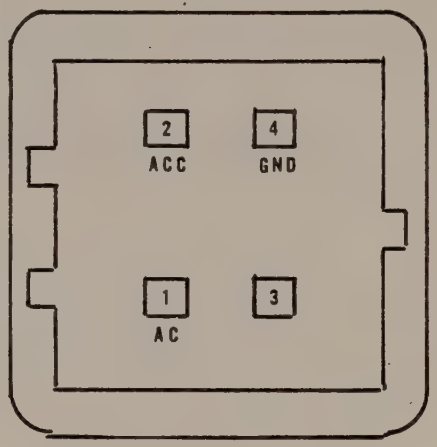
Figure 3-1 depicts the Rear Panel of the Power Supply with the operational controls, connectors and test jacks index by number. Table 3-1 lists the index controls, connectors and test jacks and describes their function.

TABLE 3-1 REAR PANEL CONTROLS, CONNECTORS AND TEST POINTS

INDEX NUMBER	CONTROLS, CONNECTORS OR TEST POINTS	FUNCTION
1	VLTS ADJ potentiometer	A 10-turn potentiometer with locking nut, that provides adjustment of the output voltage from 21 to 25V (Model 23-12-S5711) or 105 to 132V (Model 125-3-S5710).
2	OV ADJ potentiometer	A 10-turn potentiometer with locking nut, that provides adjustment of the overvoltage trip point from 22 to 26V (Model 23-12-S5711) or 125 to 130V (Model 125-3-S5710).
3	RESET pushbutton switch	A pushbutton switch that allows the overvoltage protector circuit to be reset manually after the overvoltage condition has been removed.
4	-M test jack	A test jack that allows monitoring the -M output line of the Power Supply. This test jack is electrically common with the DC connector J2 pin 4 (-M).
5	- test jack	A test jack that allows monitoring of the -V output line of the Power Supply. This test jack is electrically common with the DC connector J2 pin 6 (-V).
6	+M test jack	A test jack that allows monitoring of the +V output line of the Power Supply. This test jack is electrically common with the DC connector J2 pin 3 (+M) and pin 5 (+V).
7	FUSE 125 VAC 7.5 AMP fuse and fuse holder	A fuse holder containing a 7.5 Amp. Slo-Blo fuse to protect the Power Supply from input line over loads.

TABLE 3-1 REAR PANEL CONTROLS, CONNECTORS AND TEST POINTS (Cont'd)

INDEX NUMBER	CONTROLS, CONNECTORS OR TEST POINTS	FUNCTION
8	AC connector	A 4-pin connector that supplies the input ac line voltage to the Power Supply.
9	DC connector	A 14-pin connector that provides the Power Supply output and interface with the system.



PIN		FUNCTION
1	AC	115 Vac high
2	ACC	115 Vac low
4	GND	System Ground

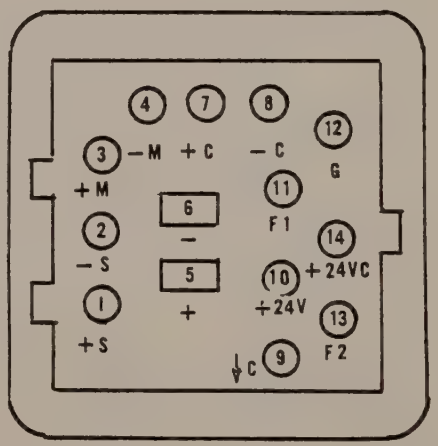


TABLE 3-1 REAR PANEL CONTROLS, CONNECTORS AND TEST POINTS (Cont'd)

INDEX NUMBER	CONTROLS, CONNECTORS OR TEST POINTS	FUNCTION
		PIN / FUNCTION
		1 +S — +Sense
		2 -S — -Sense
		3 +M — +Voltmeter
		4 -M — -Voltmeter
		5 + — +Output Voltage
		6 - — -Output Voltage
		7 +C — +Ampmeter
		8 -C — -Ampmeter
		9 C — Air flow, sensor +24V return
		10 +24V — Air flow sensor common +24 Vdc input.
		11 F1 — Air flow sensor #1 output.
		12 G — Power Supply Chassis Ground
		13 F2 — Air flow sensor #2 output.
		14 +24 VC — +24V to the air flow sensor normally open switch contacks.

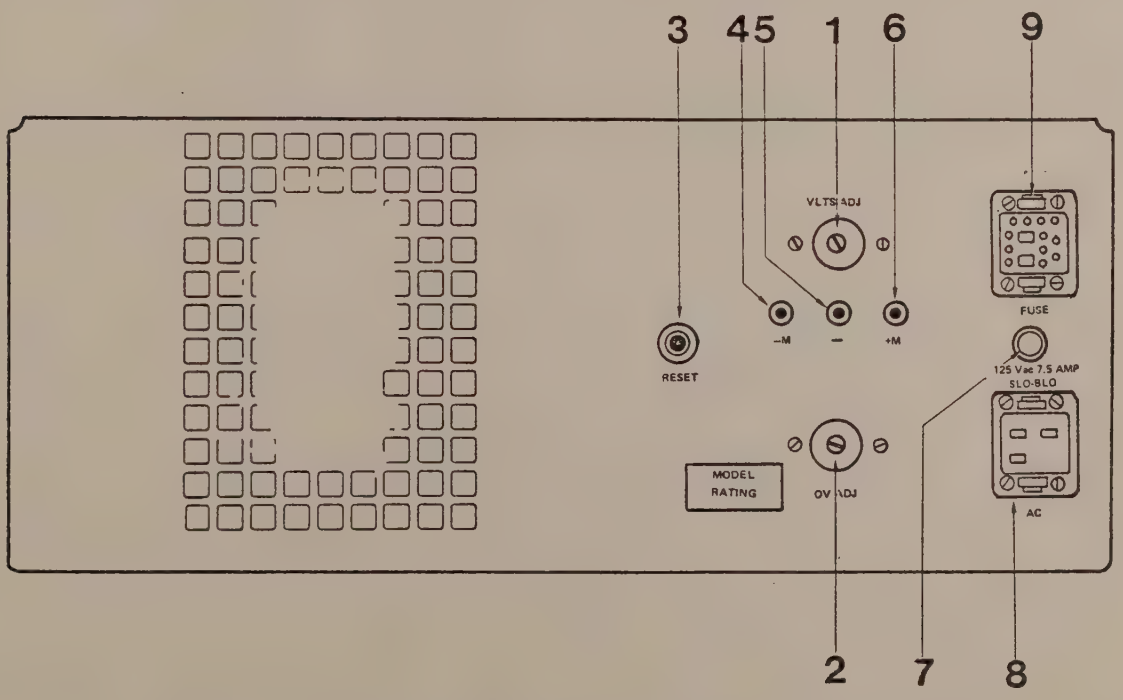


FIGURE 3-1 MODEL 23-12-S5711 and 125-3-S5710 REAR PANEL

CHAPTER 4

PRINCIPLES OF OPERATION

4.1 INTRODUCTION

This chapter describes the principles of operation of the Model 125-3-S5710 and the 23-12-S5711 Power Supplies. The following descriptions are referenced to Figure 6-1 Functional Block Diagram and Figure 6-2 Schematic Diagram #11485H.

4-2 S5710 and S5711 POWER SUPPLIES FUNCTIONAL DESCRIPTION

Both power supplies function and operate in a simular manner. The difference between the two supplies being the values of certain resistors, capacitors and zener diodes that determine the output voltage set point, the overvoltage trip point and the overcurrent limit set point.

The regulator control transistor Q101, the nine series pass transistors Q102 through Q110, the overvoltage SCR CR105 and their associated diodes, resistors and capacitors are mounted on the two heat sinks and the baffels which have their surfaces subjected to the air flow generated by the blowers B101 and B102.

The power transformer T101, the rectifier diode heat sink assembly and the filter capacitors C105, C106 and C107 and the 150 watt series pass shunt resistors R101 and R105 are chassis mounted.

The chassis, heat sink and baffel mounted components are considered power components and are identified by 100 series reference designations.

A PCB Assembly that contains the electronic circuits which provide for the output voltage regulation, overvoltage sensing and the current limiting functions, has its components assigned 1 through 99 series reference designations, thus identifying them as circuit board mounted components.

4.3 DETAILED CIRCUIT ANALYSIS

Input line voltage 115V 60 Hz nominal single phase is applied to the primary winding of the power transformer T101 via Rear Panel AC connector J1 and line fuse F101. Transformer T101 has two secondary windings. The secondary winding output taps 6 and 8 supply the main power supply bridge rectifiers (CR101 through CR104, and the secondary winding taps 3 and 5 with center tap 4 supply the rectifiers of the +12V and -12V reference supplies located on the PCB (CR1,CR2,CR21 and CR22). The positive output of the main bridge rectifier is applied to the collectors of the series pass transistors Q102 through Q107, and the negative output is connected to the -V output at the Rear Panel connector J2 via the high current isolation diode CR106. The +12V reference rectifiers CR1 and CR2 output to the +12V reference regulator circuit comprised of IC differential amplifier A1 and transistor Q1 and their associated components. The -12V reference rectifiers CR21 and CR22 output to zener diodes CR3 and CR14 to develope the - reference voltages. The reference supplies are returned to transformer center tap (T101 tap 4) via PCB pad 6 which references the supplier to the + sense line. All voltages called out on the schematic diagrams are nominal and relate to full load and nominal output as referenced to the + sense line.

IC operational amplifier A2 and its associated circuit components provide the control, sensing and output voltage set point functions. The remote + sense (PCB pad 18) and the - sense (PCB pad 16) are applied to the amplifier A2 inputs to monitor the output voltage at its load. Potentiometer R13 VOLTAGE ADJUST sets the output voltage level. In the case of remote sensing loss the sensing amplifier A2 will switch to local sensing in less than 1 ms via diodes CR9 (- local sense) and CR13 (+ local sense). Amplifier A2 outputs via PCB pad 3 and pushbutton switch S101 to the base of the regulator control transistor Q101 to provide the voltage regulation of the power supply.

The current limiting function is performed by the emitter coupled dual transistor Q9 and its associated circuitry. The voltage drop across the low resistance series resistor R119 is monitored and when it exceeds the overcurrent set level adjusted by potentiometer R36, a "foldback" control signal will be passed via transistors Q4 and Q5 to the base of the regulator control transistor Q101 to foldback the power supply. Potentiometer is normally set to limit the output current to 110% ±5% of its maximum at rated output voltage.

Overvoltage protection is provided by the circuit comprised of transistors Q3,Q12, Q13,Q14,Q8 and their associated circuit components. The power supply output voltage is monitored at PCB pad 5 (-V) and pad 19 (+V) and applied to the resistor divider string comprised of potentiometer R21 OV ADJUST and resistors R18,R19 and R20. If the output voltage exceeds the overvoltage trip point set by the OV ADJUST potentiometer, transistor Q3 will turn on and latch up the overvoltage protection circuit and gate on the "crowbar" SCR CR105, which places a low resistance short across the power supply output. Resistor R120 and capacitor C108 provide a "de-spike" function to prevent tripping of the overvoltage SCR on spikes that are less than 20 µs in duration. Pushbutton switch S101 when pressed will reset the overvoltage protection circuit and allow the power supply to power the load if the overvoltage condition has been cleared.

Two air flow sensor switches S102 and S103 are mounted in the air-streams of the blowers B101 and B102. Whenever the airflow drops below the rated blower output the sensor will provide a 24 Vdc 200 mA contact closure to generate a blower failure flag.

CHAPTER 5

PARTS LISTS

5.1 INTRODUCTION

This chapter contains the spare parts lists for each assembly in the Power Supply. Chapter 6 shows the assemblies where the listed parts are installed. Ordering information is included and should be used when purchasing parts from the factory. The parts are contained in the Replaceable Parts Lists. Explanation of the column listings and a Manufacturer's Code-To-Name Index are also included.

5.2 PART ORDERING INFORMATION

To order a part from the Replaceable Parts List, state the Systron-Donner part number, indicate the quantity required and address the order to the nearest Systron-Donner Sales or Service Center.

To order a part not listed in the Replaceable Parts List, state the instrument model number, instrument serial number, and description and function of the part, and the number of parts required. Address the order to the nearest Systron-Donner Sales or Service Center.

5.3 PARTS LISTS

Table 5-1 gives the Code-To-Name information for the manufacturers listed in the replaceable parts lists in numeric order.

Each column in the parts lists provides specific information relating to the listed parts as follows:

(1) ITEM/REF: Reference numbers applicable to assemblies are listed typically in alpha-numeric order in the REF column with numeric callouts listed in the ITEM column.

(2) COMPONENT NOMENCLATURE AND DESCRIPTION: Component names and specifications are provided in these columns and include value, tolerance, wattage rating, working voltage, construction, etc.

(3) MANUFACTURER'S CODE: H4-2 Federal Supply Code numbers are listed to identify component manufacturers. A Manufacturers Indix is provided in this chapter for cross-reference.

(4) MANUFACTURER'S PART NUMBER: True manufacturer part numbers are listed in this column.

(5) S-D STOCK NUMBER: The Systron-Donner stock number is listed in this column.

(6) T/Q (Total Quantity): This quantity, appearing after an item entry, indicates the number of times the component is used in that assembly.

TABLE 5.1 MANUFACTURER'S CODE-TO-NAME INDEX

CODE	NAME	ADDRESS
00779	Amp. Inc.	P.O. Box 3608, Harrisburg, PA. 17105
00853	Sangamo Electric Co. So. Carolina Div.	P.O. Box 128, Pickens, So. Carolina 29671
01121	Allen Bradley Co.	1201 S. 2nd St., Milwaukee, Wis. 53204
01295	Texas Instruments Inc. Semiconductor & Components Div.	13500 North Central Expressway Dallas, Texas 75231
02114	Ferroxcube Corp.	P.O. Box 359, Mt. Marion Rd. Saugerties, N.Y. 12477
02660	Amphenol Corp.	2801 S. 25th Ave., Broadview, Ill. 60153
02735	RCA Corp. Solid State Div.	Route 202 Somerville, N.J. 08876
02768	Illinois Tool Works, Inc. Fastex Div.	195 Algonquin Rd. Des Plaines, Ill. 60016
03296	Nylon Molding Corp.	40 Brown St., Springfield, N.J. 07081
03508	General Electric Company Semiconductor Prod. Dept.	Electronics Park Syracuse, N.Y. 13201
03797	Genisco Technical Corp. Eidema Div.	18435 Susana Rd. Compton, CA. 90221
03877	Transitron Electronic Corp.	168-186 Albion St. Wakefield, MA. 01880
04453	Arnolt Corp. (Code changed to 91515)	P.O. Box 540, Warsaw, In. 46580
04713	Motorola Semiconductor Products Div.	5005 East McDowell Rd. Phoenix, Ariz. 85008
05245	Components Corp.	2857 N. Halsted St., Chicago, Ill. 60657
05464	Industrial Electronic Engineers Inc.	7720 Lemona Ave., Van Nuys, CA. 91405
05574	Viking Industries Inc.	21001 Nordhoff, Chatsworth, CA. 91311
05720	Omark Industries, Inc.	2100 S.E. Milport Rd., Portland, Ore. 97222

TABLE 5.1 MANUFACTURER'S CODE-TO-NAME INDEX (CONT)

CODE	NAME	ADDRESS
05820	Wakefield Engineering Inc.	Audubon Rd., Wakefield, MA. 01880
06383	Panduit Corp.	17301 Ridgeland, Tinley Park, Ill. 60477
06540	Amatom Electronic Hardware Division of Mite Corp.	81 Rockdale Ave. New Rochelle, N.Y. 10806
06560	Airco Speer Electronics Division of Air Reduction Co. Inc.	P.O. Box 1692, Grand Plaza, 945 Grand Ave., Nogales, Ariz. 85621
06776	Robinson Nugent Inc.	P.O. Box 470, New Albany, In. 47150
07109	Oaktron Industries Inc.	704 30th Street, Monroe, Wis. 53566
07126	Digitran Co.	855 So. Arroyo Parkway, Pasadena, CA. 91109
07263	Fairchild Camera & Instrument Corp. Semiconductor Div.	313 Frontage Rd. Mountain View, CA. 94040
07293	Bratu Engineering Co.	2048 Rascher Ave., Chicago, Ill. 60625
07700	Technical Wire Products Inc.	129 Dermody St., Cranford, N.J. 07016
07933	Raytheon Co. Semiconductor Div. HQ	350 Ellis St., Mountain View, CA. 94040
08289	Blinn Delbert Co. Inc.	1678 Mission Blvd., P.O. Box 2007 Pomona, CA. 91766
08547	Wallace R. G. Co. Inc.	2301 E. Del Amo Blvd., Compton, CA. 90220
08730	Vemaline Products Co. Inc.	P.O. Box 3, 455 West Main St. Wyckoff, N.J. 07481
09353	C & K Components Inc.	103 Morse, Newton, Mass. 02158
11236	CTS of Berne Inc.	406 Parr Rd., Berne, In. 46711
11237	CTS Keene Inc.	Paso Robles, CA. 93446
11879	Holloway Kenneth C Inc.	16680 Armstrong Ave., Santa Ana, CA. 92705
12014	Chicago Rivet & Machine Co.	950 So. 25th Ave., Bellwood, Ill. 60104

TABLE 5.1 MANUFACTURER'S CODE-TO-NAME INDEX (CONT)

CODE	NAME	ADDRESS
12517	Component Research Co. Inc.	1717 19th St., Santa Monica, CA. 90404
13103	Thermalloy Co.	2021 W. Valley View Lane, Dallas, Tex. 75234
13715	Fairchild Camera & Instrument Corp Semiconductor Div., Diode Plant	4300 Redwood Hwy. San Rafael, CA. 94903
14752	Electro Cube Inc.	1710 So. Del Mar Ave. San Gabriel, CA. 91776
15513	Data Display Products	8036 Westlawn Ave., Lo. Angeles, CA. 90045
15542	Mini-Circuits Laboratory Div. of Scientific Components Corp.	2913 Quentin Rd. Brooklyn, N.Y. 11229
15636	Elec-Trol Inc.	26477 No. Golden Valley Rd. Saugus, CA. 91350
15818	Teledyne Semiconductor	1300 Terra Bella Ave. Mountain View, CA. 94040
16179	Omni Spectra Inc.	24600 Hallwood Ct., Farmington, MI 48024
16258	Space Lok Inc.	2526 No. Ontario, Burbank, CA. 91504
16299	Corning Glass Works Electronic Components Div.	3900 Electronics Dr. Raleigh, N.C. 27604
16428	Belden Corp.	P.O. Box 341, Richmond, In. 47374
16733	Phelps Dodge Communications Co. Div. of Phelps Dodge Copper Products Corp.	North Haven, CT. 06473
18324	Signetics Corp.	811 E. Arques, Sunnyvale, CA. 94086
18489	Reliable Capacitor Co.	7409 Bell Aire Ave. North Hollywood, CA. 91605
18612	Vishay Resistor Products Div. Vishay Intertechnology Inc.	68 Lincoln Hwy, Malvern, PA. 19355
19701	Mepco/Electra Inc. Electra Div.	P.O. Box 760, Mineral Wells, Tex. 76067

TABLE 5.1 MANUFACTURER'S CODE-TO-NAME INDEX (CONT)

CODE	NAME	ADDRESS
20908	Electronic Concepts Division A-T-O Inc	P.O. Box 813, Rt. 29 No. Charlottesville, VA. 22904
21192	Excelsior Hardware Co.	39 Woodland Ave., Stamford, Conn. 06904
21604	Buckeye Stamping Co.	Columbus, Ohio 43207
22591	Fire Control Engineering Co.	P.O. Box 2371, Fort Worth, Tex. 76101
23172	Alpha Wire Corp. (New Code 92194)	Elizabeth, N.J.
23880	Stanford Applied Engineering Inc.	340 Martin Ave., Santa Clara, CA. 95050
23936	Pamotor Division William J. Purdy Co.	770 Airport Blvd., Burlingame, CA. 94010
24335	Cooper Laboratories Inc.	Mystic, CT.
24655	General Radio	300 Baker Ave., Concord, MA. 01742
25088	Siemens Corp.	186 Wood Ave., So. Iselin, N.J. 08830
25120	Piezo Technology Inc.	P.O. Box 7877, 2400 Diversefield Way Orlando, Florida 32804
25403	Amperex Electronic Corp. Semiconductor & Microcircuits Div.	Providence Pike, Slatersville, R.I. 02876
26695	Compac Corp. Kleen-Stik Products Div.	420 Frelinghuysen Ave. Newark, N.J. 07114
26806	American Zettler Inc.	697 Randolph Ave., Costa Mesa, CA. 92626
27014	National Semiconductor Corp.	2950 San Ysidro Way, Santa Clara, CA. 95051
27018	Optimum Designs Inc.	152 W. 42nd St., New York, N.Y. 10017
27264	Molex Products Co.	5224 Katrine Ave., Downers Grove, Ill. 60515
27556	IMB Electronic Prod. Inc.	15401-E Carmenita Rd., Santa Fe Springs, CA. 90670
28480	Hewlett-Packard Co.	1501 Page Mill Rd., Palo Alto, CA. 94304
28520	Heyman Mfg. Co.	147 N. Michigan Ave., Kenilworth, N.J. 07033

TABLE 5.1 MANUFACTURER'S CODE-TO-NAME INDEX (CONT)

CODE	NAME	ADDRESS
29587	Bunker Ramo Corp. Amphenol Industrial Div.	1830 So. 54th Ave. Chicago, Ill. 60650
31433	Union Carbide Corp. Materials Systems Div.	Hwy. 276 S.E., Greenville, S.C. 29606
31918	International Electro Exchange Inc.	8081 Wallace Rd., Eden Prairie, N.M. 55343
32159	West-Cap Arizona	2201 E. Elvira Rd., Tucson, AZ. 85706
32293	Intersil Inc.	10900 No. Tantau Ave. Cupertino, CA. 95014
32767	Griffith Plastic Corp.	1027 California Dr., Burlingame, CA. 94010
33095	Spectrum Control Inc.	152 E. Main St., Fairview, PA. 16415
34553	Amperex Electronic Corp. Component Div.	35 Hoffman Ave., Hauppauge, N.Y. 11787
44655	Ohmite Mfg. Co.	3601 W. Howard St., Skokie, Ill. 60076
46384	Penn Engineering & Mfg. Corp.	Old Easton Hwy, Doylestown, PA. 18901
50522	Monsanto Co. Electronic Special Products	10131 Bubb Rd., Cupertino, CA. 95014
51181	Keytronics Inc.	707 North St., Endicott, N.Y. 13760
51495	R&D Plastics	780 32nd St., Richmond, CA. 94804
52542	Systron-Donner Corp. Instrument Div.	10 Systron Dr., Concord, CA. 94518
52673	KSW Electronics Inc.	So. Bedford St., Burlingame, MA. 01803
53101	Garner Glass Co.	177 S. Indian Hill Blvd., Claremont, CA. 91711
54453	Sullins Electronic Corp.	P.O. Box 757, 275 Pico Ave. San Marcos, CA. 92069
56289	Sprague Electronic Co.	North Adams, MA. 01247
70485	Atlantic India Rubber Works Inc.	571 W. Polk St., Chicago, Ill. 60607
70903	Belden Corp.	415 So. Kilpatrick, Chicago, Ill. 60644

TABLE 5.1 **MANUFACTURER'S CODE-TO-NAME INDEX (CONT)**

CODE	NAME	ADDRESS
75042	TRW Electronic Components Fixed Resistors Philadelphia Div.	401 N. Broad St. Philadelphia, PA. 19108
75915	Littlefuse Inc.	800 E. Northwest Hwy. Des Plaines, Ill. 60016
76381	Minnesota Mining and Mfg. Co.	3 M Center, St. Paul, MN. 55101
76854	Oak Industries Inc. Switch Div.	S. Main St. Crystal Lake, Ill. 60014
78189	Illinois Tool Works Inc. Shakeproof Div.	St. Charles Rd., Elgin Ill. 60120
78553	Tinnerman Products Inc.	8700 Brookpark Rd., Cleveland, Ohio 44129
79727	C-W Industries	P.O. Box 96, 550 Davisville Rd. Warminister, PA. 18974
79963	Zierick Mfg. Co.	Radio Circle, Mt. Kisco, N.Y. 10549
80294	Bourns Inc. Instrument Div.	6135 Magnolia Ave. Riverside, CA. 92506
81073	Grayhill Inc.	561 Hillgrove Ave., La Grange, Ill. 60525
81349	MIL STD	
81483	International Rectifier Corp.	9220 Sunset Blvd., Los Angeles, CA. 90069
82389	Switchcraft Inc.	5555 N. Elston Ave., Chicago, Ill. 60630
83014	Hartwell Corp.	9035 Venice Blvd., Los Angeles, CA. 90034
83330	Smith, Herman H. Inc.	812 Snediker Ave., Brooklyn, N.Y. 11207
86445	Penn Fibre & Specialty Co.	2032 E. Westmoreland St. Philadelphia, PA. 19134
86928	Seastrom Mfg. Co. Inc.	701 Sonora Ave., Glendale, CA. 91201
88245	Litton Systems Inc.	13536 Saticoy St., Van Nuys, CA. 91409
89110	Amp. Inc.	P.O. Box 3608, Harrisburg, PA. 17105
89826	Radiation Internation Inc. Portland Heavy Industries Div.	P.O. Box 20296, 19000 N.E. Sandy Blvd. Portland, Oregon 97220

TABLE 5.1 MANUFACTURER'S CODE-TO-NAME INDEX (CONT)

CODE	NAME	ADDRESS
71279	Cambridge Thermonic Corp.	445 Concord Ave., Cambridge, MA. 01238
71286	Rexnard Inc. Specialty Fastener Div.	22 Spring Valley Rd., Paramus, N.J. 07652
71296	The Canfield Rubber Co.	Bridgeport, Conn.
71400	Bussmann Mfg. Div. of McGraw-Edison Co.	2536 W. University St. St. Louis, MO. 63017
71590	Globe-Union Inc. Centralab Electronics Div.	5757 No. Green Bay Ave. Milwaukee, WI. 53201
71707	Coto Coil Co. Inc.	65 Pavilion Ave., Providnece, R.I. 02905
71785	TRW Electronic Components Cinch Connector Operations	1501 Morse Ave. Elk Grove Village, Ill 60007
72136	Electro Motive Mfg. Co. Inc.	South Park & John Sts. Willimantic, CO. 06226
72259	Nytronics Inc.	10 Pelham Pky, Pelham Mannor, N.Y. 10803
72619	Dialight Corp.	60 Stewart Ave., Brooklyn, N.Y. 11237
72982	Erie Technological Products Inc.	644 W. 12th St., Erie, PA. 16512
73138	Beckman Instruments Inc. Helipot Div.	2500 Harbor Blvd. Fullerton, CA. 92634
73508	Brawley Felt Co.	136 West St., Northampton, MA. 01060
73803	Texas Instruments Inc.	Metallurigical Materials Div. Attleboro, MA. 02703
73899	J F D Electronics Corp.	15th at 62nd St., Brooklyn, N.Y. 11219
73957	Groov-Pin Corp.	1125 Hendricks Causeway Ridgefield, N.J. 07657
74370	Birtcher Corp. Manning Instrument Div.	4371 Valley Blvd. Monterey Park, CA. 90032
74542	Hoyt Electrical Instrument Inc.	45 Washington St., Penacook, N.H. 03301
74970	E.F. Johnson Co.	299 10th Ave. S.W., Waseca, MN. 56093

TABLE 5.1 MANUFACTURER'S CODE-TO-NAME INDEX (CONT)

CODE	NAME	ADDRESS
90201	Mallory Capacitor Co.	P.O. Box 372, 3029 E. Washington St. Indianapolis, IN. 46206
91418	Radio Materials Co.	4242 W. Bryn Mawr, Chicago, Ill. 60646
91506	Augat Inc.	33 Perry Ave., Attleboro, MA. 02703
91515	Arnolt Corp.	P.O. Box 540, Warsaw, IN. 46580
91537	Magazines For Industry Inc.	777 3rd Ave., New York, N.Y. 10017
91637	Dale Electronics Inc.	P.O. Box 609, Columbus, N.E. 68601
91737	ITT Cannon/German	922 So. Lyon St., Santa Ana, CA. 92705
91836	Kings Electronics Co. Inc.	40 Marbledale Rd., Tuckahoe, N.Y. 10707
92194	Alpha Wire Corp.	Elizabeth, N.J.
92702	IMC Magnetics Corp. Eastern Div.	570 Main St., Westbury Long Island, N.Y. 11591
94222	Southco Inc.	Lester, PA. 19113
95263	Leecraft Mfg. Co. Inc.	21-16 44th Rd., Long Island City, N.Y. 11101
95348	Gordos Corp.	250 Glenwood Ave. Bloomfield, N.J. 07003
95987	Weckesser Co. Inc.	4444 W. Irving Park Rd. Chicago, Ill. 60641
96067	Microwave Associates West	999 E. Arques Ave., Sunnyvale, CA. 94086
96906	MIL STD	
96987	Benesh Tool and Mfg. Co.	1910 N. Telegraph, P.O. Box 906 Monroe, MI. 48161
98291	Sealectro Corp.	225 Hoyt, Mamaronick, N.Y. 10544
98921	O and M Mfg. Co.	8203 Market St. Rd., Houston, Tex. 77029
98978	International Electronic Research Corp.	135 W. Magnolia Ave., Burbank, CA. 91502

TABLE 5.1 **MANUFACTURER'S CODE-TO-NAME INDEX (CONT)**

CODE	NAME	ADDRESS
99392	S T M Corp.	2904 Chapman St., Oakland, CA. 94601
99800	American Precision Industries Inc. Delevan Div.	270 Quaker Rd. E. Aurora, N.Y. 14052

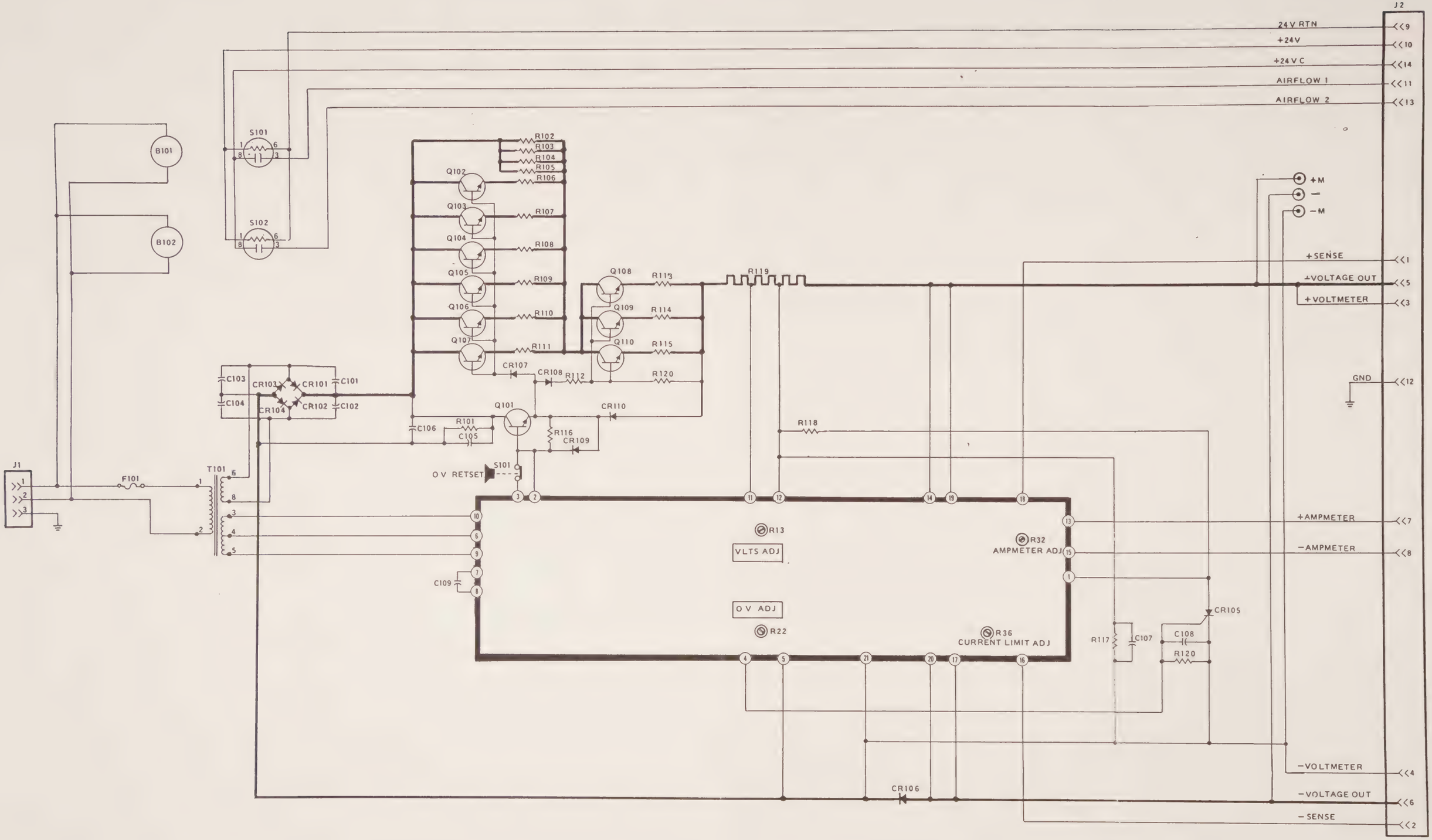


FIGURE 6-1
FUNCTIONAL BLOCK DIAGRAM

CIRCUIT BOARD COMPONENT TABLE																						
MODEL	R10	R11	R12	R13	R14	R19	R20	R21	R33	R41	R42	C8	CR11	CR15	C16	Q7-8	Q11	R31	Q8	Q3	R50	R63
23-12-5571	100Ω 0.1%	200Ω 0.1%	1KΩ 0.1%	500Ω 2W,10T	100Ω 0.1%	750Ω 3W,3%	90Ω 3W,5%	500Ω 2W,10T	130Ω 1%	OMIT	2.2Ω ½W,10%	6.8MF 35V	JUMPER	1N827	NOT USED	NOT USED	705068	470 2W	705067	705067	4.7K	470
125-B-5570	250Ω 3W,3%	500Ω 3W,3%	6KΩ 3W,3%	1KΩ 2W,10T	100Ω 3W,3%	5KΩ 3W,3%	800Ω 3W,3%	2KΩ 2W,10T	6Ω 3W	7.2Ω ½W,10%	OMIT	OMIT	UZ770	1N753A	NOT USED	NOT USED	700705	1.5K 2W	705074	705074	25K 3W	1K

NOTES
1. UNLESS OTHERWISE SPECIFIED:
   ALL RESISTORS ARE IN OHMS, 1/2W, 10%
   ALL CAPACITORS ARE IN MICROFARADS.
2. FOR COMPONENTS WITHOUT VALUES, SEE APPROPRIATE TABLE FOR CORRECT CALLOUT.
3. LAST REFERENCE DESIGNATIONS USED:

ON CIRCUIT BOARD	POWER COMPONENTS
A2	B102
C22	C109
CR27	F101
R68	CR110
Q13	Q110
	R121
	S101

#4. SELECT AT TEST

&. ALL VOLTAGES ARE NOMINAL AT FULL LOAD, NOMINAL VOUT AND +S COMMON POINT.

POWER COMPONENT TABLE																						
125-B-5570	.01MF 600V	6000MF 25OV	OMIT	500MF 170V	700429	250Ω 75W	250Ω 75W	1.0Ω 2W,10%	10Ω 3W,3%	0.4Ω 5W,5%	10KΩ 5W,5%	0.2Ω 5W,5%	12KΩ 5W,5%	720136	720136	720000	OMIT	.083	10KΩ 2W 5%
2312-5571	.03MF 50V	23,400 MF 75V	23,400 MF 75V	5000MF 40V	705071	7.7 50W	OMIT	.22Ω 2W,10%	4Ω 3W,3%	0.1Ω 5W,5%	500Ω 3W,3%	0.05Ω 5W,3%	700Ω 5W,5%	720488	720488	720010	JUMPER	.021	SHORT
MODEL	C101, C102 C103, C104	C105	C106	C107	Q101-110	R103,105	R103,104	R106;111	R112	R113-115	R117	R118	R101	CR101,102, 106	CR103 CR104	CR105	J101	R119	R122

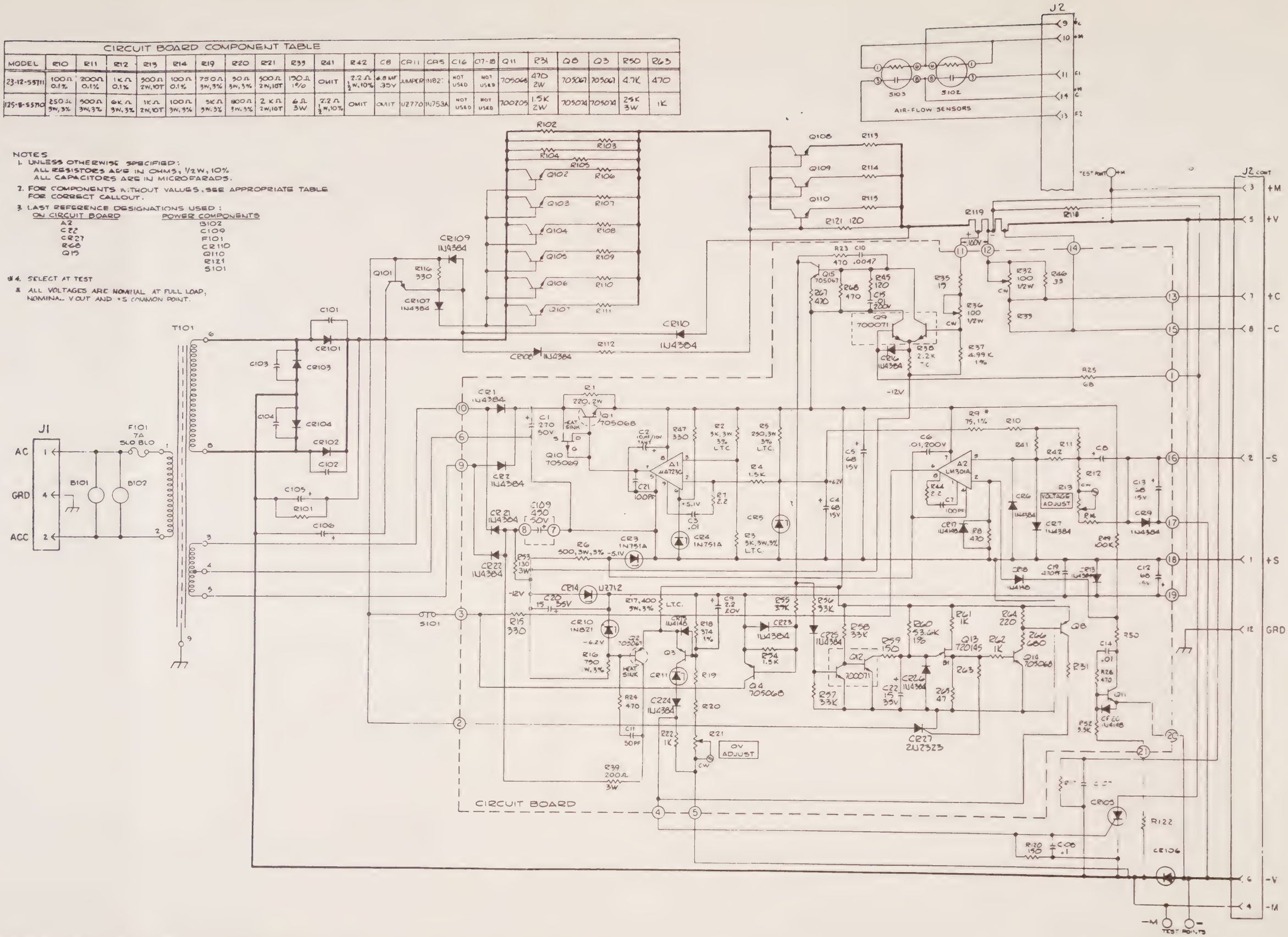


FIGURE 6-2
MODELS S5710 & S5711 POWER SUPPLY
SCHEMATIC #114850 REV K

ITEM NO.	SIZE	PART NUMBER	DESCRIPTION	REFERENCE NO.	ASSY QTY	ACT. CODE	ISS. QTY	SHT QTY
1		069052	SHIPPING ASSY			—		
5		-PD24583	COVER MTG		1	—		
7		··069036	COVER		1	2		
12		-PD24569	CHASSIS ASSY		1	2		
14		··504090	TRANSFORMER	T101	1	2		
16		··117065	SENSOR, AIR FLO	S102-103	2	1		
18		··820278	CAPACITOR, 6000μF	C105	1	1		
19		··820022	↓ 500μ 170V	C107	1	1		
21		··650633	RESISTOR, 250Ω 100W	R102, 103-	4	1		
22		—		104-105	—	R		
23		··640572	12K 5W 5%	R101	1	1		
25		··640560	10K 5W 5%	R111	1	1		
27		··860130	SPACER 6-32 X 1		4	R		
		··100933	↓ 10-32 X 1 5/16		4	R		
30		··103364	STANDOFF 4-40X 1.312		4	R		
32		··117149	BRACKET, CAP 3"		1	1		
33		··100725	↓ 1 3/8		1	1		

REVISIONS
DESCRIPTION

MODEL	JOB NO.	LOT QTY	LOT NO.	CODE IDENT
				52542

PLANNER	PREP DATE	SYSTRON DONNER CORPORATION
	CHK'D	SHIPPING ASSY
MAT. DUE	APP'D	125-3-S7501
B/U REQ.		DRAWING NO.
B/U COMP		REF — SIZE P PART NO. 069052 REV
	USED ON	SHEET 1 OF 13

ITEM NO.	SIZE	PART NUMBER	DESCRIPTION	REFERENCE NO.	ASSY QTY	ACT. CODE	ISS. QTY	SHT QTY
		069052 CONT	SHIP ASSY					
		·PD24569 (CONT)	CHNS. ASSY					
35		··102944	SPEED NUT		16	1		
36		T981033	SPEED NUT		5	1		
38		··T970132	SCREW, 6-32 x 1/2		1	R		
40		··117148	WASHER, CUP		8	1		
42		··117066	SOCKET, 9PIN MIN		2	1		
44		··069032	BAFFLE		2	2		
46		··069042	CHASS. FIN		1	2		
48		·PD24566	HEAT SINK #1		1	2		
50		··700429	TRANSISTOR		5	1		
52		··640080	RESISTOR, 1Ω 2W	R109-110-111	3	1		
54		··630150	10Ω 3W	R112	1	1		
55		··101474	330Ω 1/2W 1%	R116	1	1		
57		··630017	.4Ω 5W	R115	1	1		
59		101508	120Ω 1/2W 5%	R121	1	1		
61		117100	DIODE, 1N4354	CR107-110	4	1		

REVISIONS
DESCRIPTION

MODEL	JOB NO.	LOT QTY	LOT NO.	CODE IDENT
				52542
PLANNER	PREP DATE		SYSTRON DONNER CORPORATION	
	CHKD		SHIPPING ASSY	
MAT. DUE	APPD		125-3-57501	
B.O. REQ.			DRAWING NO.	
			REF SIZE PART NO.	REV
B.O. COMP.			— P 069052	
	SEQ CN		SHEET 2 OF 13	

ITEM NO.	SIZE	PART NUMBER	DESCRIPTION	REFERENCE NO.	ASSY QTY	ACT. CODE	ISS. QTY	SHT QTY
		069052 CONT	SHIP ASSY					
		· PD24569	CHASS					
		· · PD24566	H.S. #1 ASSY					
65		· · · 830101	SOCKET		5	1		
69		· · · 860070	STANDOFF		7	R		
71		· · · T990290	WASHER, MICA		5	R		
73		· · · 069033	HEATSINK FAB		1	2		
80		· · PD24567	HEAT SINK #2 ASSY		1	2		
82		· · · 640080	RESISTOR 1Ω 2W 10%	R106-107-108	3	1		
84		· · · 630017	· 42 5W 3%	R113-114	2	1		
86		· · · 700429	TRANSISTOR		5	1		
88		· · · 830101	SOCKET		5	1		
90		· · · 860070	STANDOFF 6-32		6	R		
92		· · · T990290	WASHER, MICA		5	R		
94		· · · 069033	HEAT SINK FAB		1	2		

REVISIONS DESCRIPTION

REV

MODEL	JOB NO.	LOT QTY	LOT NO.	CODE IDENT
				52542

PLANNER	PREP DATE	SYSTRON DONNER CORPORATION
	CHK'D	SHIPPING ASSY
MAT. DUE	APP'D	125-3-57501
B/U REQ.		DRAWING NO.
B/U COMP	USED ON	REF — SIZE P PART NO. 069052 REV
		SHEET 3 OF 13

FORM EB-A 11 JUL 75

ITEM NO.	SIZE	PART NUMBER	DESCRIPTION	REFERENCE NO.	ASSY QTY	ACT. CODE	ISS. QTY	SHT QTY
		069052 (CONT)	SHIP. ASSY					
		.P024569	CHAS. ASSY					
100		..P024570	DIODE ASSY		1	2		
102		...720136	DIODE.	CR101-102-103-104	4	1		
104		...800090	CAPACITOR, .01μF 600V		4	1		
106		...T960085	LUG		4	R		
108		...T990307	WASHER, MICA		8	1		
110		...T990350	RING, INSUL		4	1		
112		...T990340	RING, INSUL		4	1		

REVISIONS DESCRIPTION

REV

MODEL	JOB NO.	LOT QTY	LOT NO.	CODE IDENT
				52542

PLANNER | PREP DATE | SYSTRON DONNER CORPORATION

CHK'D | SHIPPING ASSY

MAT. DUE | APP'D | 125-3-S7501

B/U REQ. | DRAWING NO.

B/U COMP | REF | SIZE | PART NO. | REV

— | P | 069052

USED ON | SHEET 4 OF 13

ITEM NO.	SIZE	PART NUMBER	DESCRIPTION	REFERENCE NO.	ASSY QTY	ACT. CODE	ISS. QTY	SHT QTY
		069052 CONT	SHIP. ASSY					
		· PD024569 J	CHASS ASSY					
125		· · PD024568	SCR SHUNT ASSY		1	2		
127		· · · 720000	SCR DIODE	CR105	1	1		
128		720136	DIODE	CR106	1	1		
129		· · · 630022	RESISTOR. 0.2Ω 5W 3%	R118	1	1		
131		· · · 670081	SHUNT 0.083Ω	R119	1	1		
133		· · · 810212	CAPACITOR 450μf 50V	C109	1	1		
135		· · · 100199	.1μf	C108	1	1		
137		· · · 101527	RESISTOR, 150Ω ¼W 5%	R120	1	1		
138		101651	" 10KΩ 2W 5%	R122	1	1		
139		· · · T960640	LUG		1	R		
141		· · · 417153	WASHER. MICA		2	1		
143		T990340	RING, INSUL		1	1		
144		T990350			1	1		
145		T990180	WASHER, LOCK		1	R		
146		T990307	MKA		2	R		
147		T960085	LUG		1	R		
149		· · · 860070	STANDOFF 6-32		10	R		
151		· · · TV14592	HEAT SINK FAB		1	2		

REVISIONS DESCRIPTION REV

MODEL	JOB NO.	LOT QTY	LOT NO.	CODE IDENT
				52542

PLANNER | PREP DATE | SYSTRON DONNER CORPORATION

CHK'D | SHIPPING ASSY

MAT. DUE | APP'D | 125-3-S7501

B/U REQ. | DRAWING NO.

REF	SIZE	PART NO.	REV
—	P	069052	

B.U COMP | USED ON | SHEET 5 OF 13

ITEM NO.	SIZE	PART NUMBER	DESCRIPTION	REFERENCE NO.	ASSY QTY	ACT. CODE	ISS. QTY	SHT QTY
		069052	SHIP ASSY					
		· PD24569	CHASSIS ASSY					
160		· · 106664	FAN		2	1		
162		103961	FINGER GUARD		2	1		
164		069034	FRONT PANEL		1	2		
170		· PD24571	REAR PANEL ASSY		1	2		
172		· · · 839181	RECEPTACLE		1	1		
174		· · · 839183	SOCKET MODULE		1	1		
176		· · · 839186	CONTACT		16	1		
178		· · · 839184	CONTACT		2	1		
180		· · · 839187	LOCKING LATCH		4	1		
182		- - - 839180	RECEPTACLE		1	1		
184		· · · 839182	SOCKET MODULE		1	1		

REVISIONS
DESCRIPTION
REV

MODEL	JOB NO	LOT QTY	LOT NO.	CODE IDENT
				52542

PLANNER | PREP DATE | CHK'D | APP'D | MAT. DUE | S.U. REQ. | S.U. COMP | ORDERED

SYSTRON DONNER CORPORATION

TWINAXE ASSY

125-3-57501

DRAWING NO.

DEF SIZE	PART NO.	REV
— P	069052	

SHEET 6 OF 13

ITEM NO.	SIZE	PART NUMBER	DESCRIPTION	REFERENCE NO.	ASSY QTY	ACT. CODE	ISS. QTY	SHT QTY
		069052 CONT	SHIP ASSY					
		· PD24569 (CONT)	CHASS ASSY					
		· · PD24571 (CONT)	R.P. ASSY					
187		· · · 839185	CONTACT		3	1		
189		· · · 102409	FUSE HOLDER		1	1		
191		· · · 870193	FUSE	F101	1	1		
193		· · · 065097	NAME PLATE		1	1		
195		· · · 117106	HOLE PLUG 7/8 DIA		2	1		
197		· · · 117150	JACK RED		1	1		
199		· · · 117151	BLK		2	1		
201		· · · 880570	SWITCH, BUTTON		1	1		
205		· PD28170	JUMPER W/L		1	2		
207		· PD2816901	CABLE ASSY		1	2		
208		· · PD28169	W/L		1	2		
209		· · · · 839186	PIN		12	1		
210		· · · · 839184			2	1		
211		· · · · 839185			3	1		
212		· · · · 960515	SPACE LUG G		6	1		
213		· · · · 960514	L		1	1		
214		· · · · 960565	E		1	1		
215		· · · · 960558	A		1	1		

REVISIONS DESCRIPTION

REV

MODEL	OB NO.	LOT QTY	LOT NO.	CODE IDENT
				52542

PLANNER	PREP DATE	SYSTRON DONNER CORPORATION
	CHK'D	SHIPPING ASSY
MAT. DUE	APP'D	125-3-57501
B/U REQ.		DRAWING NO.
B/U COMP		REF — SIZE P — PART NO. 069052 — REV
	USED ON	SHEET 7 OF 13

ITEM NO.		PART NUMBER	DESCRIPTION	REFERENCE NO	ASSY QTY	ACT. CODE	ISS. QTY	SHT QTY
		069052 CONT	SHIPP. ASSY		X			
		PD24569 ↓	CHASS ASSY					
217		PD24561	PC ASSY		1	2		
218			SCHEMATIC	T1148S	–	R		
220		T1148/6	DETAIL		1	2		
221			A/W	T1148/0	–	R		
223		810175	CAPACITOR 270AF, 50V	C1	1	1		
224		100063	10MF, 20V TANT	C2	1	1		
225		100168	.01 MF, 200V	C3	3	1		
226		100184	68 MF, 15V	C4	2	1		
227			S/A C4	C5				
228			S/A C3	C6				
229		100173 01	100 PF, 500V	C7	2	1		
230			N/U	C8				
231		100203	2.2 MF 20V	C9	1	1		
232		800050	.0047μF, 600V	C10	3	1		
233		800003	50 PF	C11	1	1		
234		100184	68 MF, 15V	C12	2	1		
235			S/A C12	C13				
236		100168	.01 MF - 200V	C14	1	1		
237			S/A C3	C15				
238			NOT USED	C16				
239			NOT USED	C17				
240			NOT USED	C18				
241		100221 01	470 PF, 300V	C19	1	1		
242		821027	15 MF 35V	C20	2	1		
243			S/A C7	C21				
244			CAPACITOR S/A C20	C22				
245								
246								

REV	DESCRIPTION
B	REVISED SHEETS 1 & 4 4-23-76 RM
C	ECO 15041 1-21-77 RM

MODEL: GE PS

JOB NO.

LOT NO.

CODE IDENT: 52542

PLANNER

PREP DATE: 5-5-76 4-21-76

SYSTEM: DUNNER INFORMATION

CHKD

MAT'L APP

SHIPPING ASSY

125-3-57501

DRAWING NO.

B'L REL

B'L COMP

REV | CAGE | PART NO. | QTY

– | P 069052

SHEET 9 OF 13

FORM 58 A 11 JUL 75

ITEM NO.	PART NUMBER	DESCRIPTION	REFERENCE NO.	ASSY QTY	ACT. CODE	SPL QTY	SHT QTY
247	-1-1171100	DIODE IN4384 GLASS	CR1	13	1		
248		S/A CR1	CR2				
249	-1-1003788	IN751A	CR3	2	1		
250		S/A CR3	CR4				
251	-1-1003877	IN753A	CR5	1	1		
252		S/A CR1	CR6				
253		S/A CR1	CR7				
254		NOT USED	CR8				
255		S/A CR1	CR9				
256	-1-1003777	IN821A	CR10	1	1		
257	-1-7201556	UZ770	CR11	1	1		
258		NOT USED	CR12				
259		S/A CR1	CR13				
260	-1-7201488	IN4883	CR14	1	1		
261	-1-7204400	IN4148	CR15	4	1		
262		S/A CR1	CR16				
263		S/A CR15	CR17				
264		S/A CR15	CR18				
265		NOT USED	CR19				
266		S/A CR15	CR20				
267		S/A CR1	CR21				
268			CR22				
269			CR23				
270			CR24				
271			CR25				
272		S/A CR1	CR26				
273	-1-7251107	DIODE 2N2323	CR27	1	1		
279							

MODEL	JOB NO.	LOT QTY	LOT NO.	CODE IDENT 52542
PLANNER	PREP DATE G. Smith 4-27-76	SYSTRON DONNER CORPORATION		
	CHK'D	SHIPPING ASSY		
MAT. DUE	APP'D	125-3-57501		
B/U REQ.		DRAWING NO.		
B/U COMP	USED ON	SIZE P PART NO. 069052		REV
		SHEET 9 OF 13		

SYSTRON DONNER DESCRIPTION

REV

FORM ES-A 11 JUL 75

ITEM NO.	PART NUMBER	DESCRIPTION	REFERENCE NO.	ASSY QTY	ACT. CODE	ISS. QTY	SHT QTY
280	106039	RESISTOR 220Ω 2W CC	R1	1	1		
281	630460	3K 3W 3%	R2	2	1		
282		S/A R2	R3				
283	101459	1.5K 1/2W 5%	R4	2	1		
284	630280	250Ω 3W 3%	R5	1	1		
285	630340	500Ω 3W 3%	R6	1	1		
286	106012	2.2Ω 1/2W 5%	R7	2	1		
287	101539	470Ω 1/2W 5%	R8	7	1		
288	620008	75Ω 1/4W 1%	R9	1	1		
289	630280	250Ω 1/4W .1%	R10	1	1		
290	630340	500Ω 3W 1%	R11	1	1		
291	630499	6K 3W 3%	R12	1	1		
292	600169	1K Ω 2W 10T POT	R13	1	1		
293	630250	100Ω 3W 3%	R14	1	1		
294	101474	330Ω 1/2W 5%	R15	1	1		
295	630372	750Ω 1W, 3%	R16	1	1		
296	630320	400Ω 3W 3%	R17	1	1		
297	620135	374Ω 1/4W 1%	R18	1	1		
298	630490	5KΩ 3W 3%	R19	1	1		
299	630380	800Ω 3W 3%	R20	1	1		
300	600209	POT 2K 2W 10TURN	R21	1	1		
301	101467	1K 1/2W 5%	R22	4	1		
302		S/A R8	R23				
303		S/A R8	R24				
304	102238	68Ω 1/2W 5%	R25	1	1		
305		S/A R8	R26				
306		NOT USED	R27				
307			R28				
308			R29				
309		NOT USED	R30				
310	101741	1.5KΩ 2W 5%	R31	1	1		
311	600047	100Ω 1/2W POT	R32	2	1		
312	680130	RISISTOR 6Ω 3W 3%	R33	1	1		

REVISION DESCRIPTION

REV

MODEL	JOB NO	LOT QTY	LOT NO	CODE IDENT
				52542

PLANNER | PREP DATE 4-27-76 | CHK'D | MAT. ENG | APP'D | B.U. REQ | APP'D CUMP | USED ON

SYSTEM DONNER EXPLORATION

SHIPPING ASSY

125-3-57501

DRAWING NO

REF	SIZE	PART NO	REV
-	P	069052	

SHEET 10 OF 13

FORM 28 A 11 JUL 75

ITEM NO.	SEQ NO.	PART NUMBER	DESCRIPTION	REFERENCE NO.	ASSY QTY	ACT. CODE	ISS. QTY	SHT QTY
3	12		RESISTOR NOT USED	R34				
3	13	101487	15Ω 1/2W 5%	R35	1	1		
3	14		S/A R32	R36				
3	15	620580	4.99K 1/8 W 1%	R37	1	1		
3	16	102821	2.2K 10% T.C.	R38	1	1		
3	17	630270	200Ω 3W 3%	R39	1	1		
3	18		NOT USED	R40				
3	19	610003	2.2Ω 1/2W 10%	R41	1	1		
3	20		NOT USED	R42				
3	21		NOT USED	R43				
3	22		S/A R7	R44				
3	23	101508	120Ω 1/2W 5%	R45	1	1		
3	24	101540	33Ω 1/2W 5%	R46	1	1		
3	25	101474	330Ω 1/2W 5%	R47	1	1		
3	26		NOT USED	R48				
3	27	101480	100K 1/2W 5%	R49	1	1		
3	28	630765	25K 3W 3%	R50	1	1		
3	29		NOT USED	R51				
3	30	101432	3.3K 1/2W 5%	R52	1	1		
3	31	630255	130Ω, 3W, 3%	R53	1	1		
3	32		S/A R4	R54				
3	33	101530	3.9K 1/2W 5%	R55	1	1		
3	34	101456	33K 1/2W 5%	R56	3	1		
3	35		S/A R56	R57				
3	36		S/A R56	R58				
3	37	101527	150Ω 1/2W 5%	R59	1	1		
3	38	620729	53.6K 1/4W 1%	R60	1	1		
3	39		S/A R22	R61				
3	40		S/A R22	R62				
3	41		S/A R22	R63				
3	42	101667	220Ω 1/2W 5%	R64	1	1		
3	43	101575	47Ω 1/2W 5%	R65	1	1		
3	44	101475	RESISTOR 680Ω 1/2W 5%	R66	1	1		

MODEL | JOB NO | LOT QTY | LOT NO | CODE IDENT 52542

PLANNER | PREP DATE 4-27-76 | SYSTRON DONNER CORPORATION

LINED | SHIPPING ASSY

MAT. DUE | APPD | 125-3-S7501

B/U REQ | DRAWING NO.

B/U COMP | USED ON | REV | SIZE | PART NO. | REV

— | P | 069052

SHEET 11 OF 13

REVISIONS DESCRIPTION

REV

FORM 68 A 11 JUL 75

ITEM NO.	PART NUMBER	DESCRIPTION	REFERENCE NO.	ASSY QTY	ACT. CODE	ISS. QTY	SHT QTY
345		RESISTOR S/A R8	R67				
346		RESISTOR S/A R8	R68				
355	705068	TRANSISTOR 2N2219A	Q1	3	1		
356	705067	2N2905A	Q2	2	1		
357	705074	2N5416	Q3	2	1		
358		S/A Q1	Q4				
359		NOT USED	Q5				
360		NOT USED	Q6				
361		NOT USED	Q7				
362		S/A Q3	Q8				
363	705071	TR1000	Q9	2	1		
364	705069	2N4340	Q10	1	1		
365	705205	2N3440	Q11	1	1		
366		S/A Q9	Q12				
367	729145	2N2647	Q13	1	1		
368		S/A Q1	Q14				
369		S/A Q2	Q15				
371	025756	I.C. LM723C	A1	1	1		
372	025745	I.C. LM301A	A2	1	1		

MODEL	JOB NO.	LOT QTY	LOT NO	CODE IDENT 52642
PLANNER	PREP DATE 6-23-76		SYSTRON DONNER CORPORATION	
	CHK'D		SHIPPING ASSY	
MAT. DUE	APP'D		125-3-57501	
B/U REQ.			DRAWING NO.	
B/U COMP			SIZE P	PART NO. 069052
	USED ON		SHEET 12 OF 13	

REVISIONS DESCRIPTION

ASY

FORM 68-A 11 JUL 75

ITEM NO.	PART NUMBER	DESCRIPTION	REFERENCE NO	ASSY QTY	ACT. CODE	ISS. QTY	SHT QTY
38	1174772	BRACKET		2	Z		
39	10062504	SCREW #2-56 x 1/4		4	1		
40	870526	HEAT SINK CLIP		2	1		
41	870220	10 TURN POT SHAFT LOCK		2	1		
42	7060467	STANDOFF		40	R		
43	5431311	SOLDER TERM		21	R		
44	100636	NUT #2-56		4	R		
45	100612	WASHER FLAT		4	R		

MODEL	JOB NO	LOT QTY	LOT NO.	CODE IDENT 52542
PLANNER	PREP DATE 6 SHTS. 6-4-74		SYSTRON DONNER CORPORATION	
	CHK'D		SHIPPING ASSY	
MAT. DUE	APP'D		125-3-S7501	
S/U REQ.			DRAWING NO.	
S/U COMP			SERVICE PART NO. — P 069052	REV 1
			USED ON	SHEET 13 OF 13

REVISIONS: REV | DESCRIPTION

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